

particular, a *Bgl*II digest of NTHi strain 2019 DNA resulted in a 2.4 kb fragment; whereas similar digests of DNA from mutants NTHi B28 and B29 revealed 4.0 kb fragments. Further, the 4.0 kb fragments were digested by *Eco*RI which is present in the mTn3.--

A clean copy of this paragraph is attached hereto.

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. Specific amendments to individual claims are detailed in the following marked up set of claims.

Please add new claim 34 and amend the claims as follows.

12

22. (Amended) A method of making a mutant endotoxin comprising
mutating an *htrB* gene encoding a wild type endotoxin in [within] a wild type
gram-negative bacterial pathogen to provide the mutant endotoxin; wherein the mutant
endotoxin is the same as the wild type endotoxin except for [form an *htrB* mutant
pathogen, wherein the *htrB* gene encodes an endotoxin] lacking one or more secondary
acyl chains of lipid A [contained in a wild type gram-negative bacterial pathogen and
lacking 3-hydroxy unsaturated C16 fatty acid substitutions on the lipid A as compared to
a wild-type bacterial pathogen], and wherein the mutant endotoxin has substantially
reduced toxicity when compared to the endotoxin of the wild type gram-negative bacterial
pathogen[, and
purifying the mutant endotoxin from the *htrB* mutant pathogen].

13

29. (Amended) A method for producing endotoxin-specific antisera, the method comprising
(a) immunizing an individual with a vaccine formulation comprising an *htrB* mutant
of a gram-negative bacterial pathogen, endotoxin isolated from the *htrB* mutant of the
gram-negative bacterial pathogen, or endotoxin purified from the *htrB* mutant of the
gram-negative bacterial pathogen wherein the endotoxin is conjugated to a carrier protein;
and